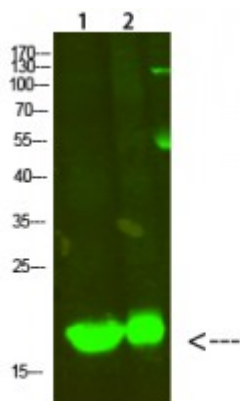


Anti-MYL2 antibody



Description	Rabbit polyclonal to MYL2.
Model	STJ99335
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human MYL2.
Immunogen Region	91-140aa
Gene ID	4633
Gene Symbol	MYL2
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	MYL2 Polyclonal Antibody detects endogenous levels of MYL2.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Myosin regulatory light chain 2, ventricular/cardiac muscle isoform MLC-2 MLC-2v Cardiac myosin light chain 2 Myosin light chain 2, slow skeletal/ventricular muscle isoform MLC-2s/v Ventricular myosin light chain 2
Molecular Weight	18kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:75830 MIM:160781
Alternative Names	Myosin regulatory light chain 2, ventricular/cardiac muscle isoform MLC-2 MLC-2v Cardiac myosin light chain 2 Myosin light chain 2, slow skeletal/ventricular muscle isoform MLC-2s/v Ventricular myosin light chain 2
Function	Contractile protein that plays a role in heart development and function . Following phosphorylation, plays a role in cross-bridge cycling kinetics and cardiac muscle contraction by increasing myosin lever arm stiffness and promoting myosin head diffusion; as a consequence of the increase in maximum contraction force and calcium sensitivity of contraction force. These events altogether slow down myosin kinetics and prolong duty cycle resulting in accumulated myosins being cooperatively recruited to actin binding sites to sustain thin filament activation as a means to fine-tune myofilament calcium sensitivity to force . During cardiogenesis plays an early role in cardiac contractility by promoting cardiac myofibril assembly .
Cellular Localization	Cytoplasm, myofibril, sarcomere, A band
Post-translational Modifications	N-terminus is methylated by METTL11A/NTM1. Phosphorylated by MYLK3 and MYLK2; promotes cardiac muscle contraction and function . Dephosphorylated by PPP1CB complexed to PPP1R12B . The phosphorylated form in adult is expressed as gradients across the heart from endocardium (low phosphorylation) to epicardium (high phosphorylation); regulates cardiac torsion and workload distribution .